

ZHERVE, G.K. (Leningrad); DOMEROVSKIY, V.V. (Leningrad)

Review of B.N. Tardov's book "General geometry of the
hydrogenerators of operational hydroelectric power stations."
Elektrichestvo no.11:90-92 N '63. (MIRA 16:11)

PETROV, G.N., doktor tekhn.nauk, prof.; GURIN, Ya.S., kand.tekhn.nauk;
ZHERVE, G.K., kand.tekhn.nauk; LINDORF, L.S., kand.tekhn.nauk

New standards for electric machinery testing methods. Vest.
elektroprom. 34 no.4:39-44 Ap '63. (MIRA 16:10)

FILIPPOV, Iosif Filippovich; ZASLAVETIY, D.I., dots., retsenzent;
IVANOV, N.P., kand. tekhn. nauk, nauchn. red.; USSER,
A.S., kand. tekhn. nauk, red.; ZHERVE, G.K., kand. tekhn.
nauk, red.; ZARITSKIY, Ya.V., red.

[Problems of the cooling of electrical machines] Voprosy
okhlazhdeniia elektricheskikh mashin. Moskva, Energiia,
1964. 333 p. (MIRA 18:1)

ZHERYAGIN, V. G.

Zheryagin, V. G.

"The use of herbicides on tea plantations." Moscow Order of Lenin
Agricultural Academy imeni K. A. Timiryazev. Moscow, 1956. (Dissertation
for the Degree of Candidate in Sciences.)

Knizhnaya Letopis'
No. 18, 1956. Moscow.

ZHESHOVSKIY, M. [Rzeszowski, M.] (Varshava)

Honorary award. Kryl. rod. 13 no.3:16 Mr '62.

(MIRA 18:5)

TEMNIKOVA, T.I.; ZHESKO, T.Ye.

Condensation of α -methoxy- α -phenyl- β , β -dimethylethylene
oxide with benzonitrile. Zhur.ob.khim. 33 no.10:3436 0 '63.
(MIRA 16:11)

1. Leningradskiy gosudarstvennyy universitet.

ZHESTEV, N.

Wrote about (1) Pashskaya Splavnaya Kontora: lumbering, floating, production of sleepers, shipbuilding, number of workers. (2) Timber output in "30-River District". 1. Pashskiy /R-N. 1 and 2. Leningradskaya o., RSFSR

SOVIET SOURCE: N: Leningradskaya Pravda No. 54, 6 Mar. '47, Leningrad
ABSTRACTED IN USAF "TREASURE ISLAND", ON FILE IN LIBRARY OF CONGRESS, AIR INFORMATION DIVISION, REPORT NO. 90116. UNCLASSIFIED

ZHESTKOV, A.I. (Yuzhno-Sakhalinsk)

Late posttraumatic hemorrhages into the brain stem. Sud.-med.
ekspert. 5 no.3:50-51 J1-S '62. (MIRA 15:9)
(BRAIN—HEMORRHAGE)

VLASOV, B.I.; ZHESTKOV, A.G.

Selecting an optical system for observations of artificial
earth satellites for timing purposes. Biul. sta. opt. nabl.
isk. sput. Zem. no.33:6-11 '63. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-
tekhnicheskikh izmereniy.

"APPROVED FOR RELEASE: 03/15/2001

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[illegible]

YUDIN, Vasily Kliment'yevich; ZHESTKOV, S.V., kand. tekhn. nauk, dots.,
retsenzent; FLEYSHMAN, N.P., dots., retsenzent; SLIN'KO, B.I.,
red.; SERAFIN, V.T., tekhn. red.

[Design of three-dimensional frames] Raschet prostranstven-
nykh ram. Kiev, Gos. izd-vo lit-ry po stroit. i arkhitekt.
USSR, 1961. 141 p. (MIRA 15:3)

1. Leningradskiy inzhenerno-stroitel'nyy institut (for Zhestkov).
2. L'vovskiy gosudarstvennyy universitet (for Fleyshman).
(Structural frames)

ZHESTKOV, V.; Yachin, Yu.

Design and maintenance characteristics of the ChMZAP-5208 trailer.
Avt.transp. 39 no.6:43-45 Je '61. (MIRA 14:7)
(Truck trailers)

ACC NR: AP7003658

SOURCE CODE: UR/0079/66/036/008/1444/1447

AUTHOR: Yanik, B.; Zheshutko, V.; Pel'char, T.

ORG: Medical Academy, Krakow

TITLE: Investigation of cyclotriphosphazatriene derivatives. I. Synthesis of some thioimido derivatives of cyclotriphosphazatriene

SOURCE: Zhurnal obshchey khimii v. 36, no. 8, 1966, 1444-1447

TOPIC TAGS: organic sulfur compound, organic synthetic process, organic phosphorus compound

ABSTRACT: A series of thioimido derivatives of cyclotriphosphazatriene were synthesized by the reactions of hexachlorocyclotriphosphazatriene with thioamides, such as thiourea, 4-thioamido-3-antipyrino, dithiooxamido, and thiosemicarbazide. The final structure of the compounds formed depended on the secondary reactions of cyclization. Two of the derivatives gave colored precipitates with ions of heavy metals from acid, neutral, and aqueous ammonia solutions.

Orig. art. has: 1 table. [JPRS: 38,970]

SUB CODE: 07 / SUBM DATE: 21Jul65 / ORIG REF: 001 / OTH REF: 012

Card 1/1 jb

UDC: 547.419.1:543.4
0926 0281

ZHESTKOV, V.A.

Standardisation of the brake drives for trailers and semi-trailers. Standartizatsiia 27 no.5:10-11 My '63.

(MIRA 16:6)

(Truck trailers—Brakes)

MOLOTKOVSKIY, Yu.G.; ZHESTKOVA, I.M.

Morphological and functional changes in isolated chloroplasts
under the effect of oleate. Fiziol.rast. 12 no.5:1017-1023
N-D '65. (MIRA 18:12)

1. Institut fiziologii rasteniy imeni K.A.Timiryazova AN
SSSR, Moskva. Submitted December 30, 1964.

MOLOTKOVSKIY, YU.G.; ZHESTKOVA, I.M.

Mechanism of the protective action of sugars at high temperatures.
Fiziol. rast. 11 no.2:301-307 Mr-Apr '64. (MIRA 17:4)

1. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of
Sciences, Moscow.

NEBOGATOV, Yu.Ye.; TAMAROVSKIY, V.I.; OZEROV, V.A., kand. tekhn.
nauk, retsenzent; ZHESTKOVA, I.N., inzh., red.

[Special casting processes] Spetsial'nye vity lit'ia. Mo-
skva, Mashinostroenie, 1965. 158 p. (MIRA 18:9)

OSIN, I.A.; GORSHKOV, G.B.; BUROV, V.S., inzh., retsenzent;
ZHESTKOVA, I.N., inzh., red.

[Technical achievements of the mold makers at the Ural
Machinery Plant] Tekhnicheskie dostizheniia formovshchi-
kov Uralmashzavoda. Moskva, Mashinostroenie, 1964. 62 p.
(MIRA 17:10)

ZHAROV, N.T.; DUBININ, N.P., doktor tekhn. nauk, prof.,
retsenzent; POLOVINKIN, P.I., dots., retsenzent;
CHERNIN, E.A., inzh., retsenzent; ZHESTKOVA, I.N., inzh., red.

[Automation of certain foundry processes] Avtomatiza-
tsiia nekotorykh liteinykh protsessov. Moskva, Mashino-
stroenie, 1964. 278 p. (MIRA 18:1)

KNYAZYUK, L.V.; POROYKOV, I.V., doktor tekhn. nauk, prof.,
retsenzent; ZHESTKOVA, I.N., inzh., red.

[Radiography of castings] Rentgenografiia otlivok. Mo-
skva, Mashinostroenie, 1965. 95 p. (MIRA 18;3)

ZHESTKOVA, T.N.

Some problems in studying Quaternary frozen sediments as
revealed by the studies in the Vorkuta region. Trudy Inst.
merzl.AN SSSR 18:63-71 '62. (MIRA 16:2)
(Vorkuta region--Frozen ground)

ZHESTKOVA, T.N.

Seasonal freezing and thawing of ground in the region of the
future Mukhtuya-Mirnyy highway. Trudy Inst.merz1.AN SSSR 16:
116-127 '60. (MIRA 13:4)

(Lena Valley--Frozen ground)
(Vilyuy Valley--Frozen ground)

Zhestkov, D.K.

SOLOV'YEV, A.V.; RAZUMOV, N.V.; ~~ZHESTKOV, D.K.~~

Investigating natural oil seepage in the region of the village of
Ay in Dolinsk District. Soob. Sakhal. kompl. nauch.-issl. inst.
AN SSSR no.5:129-131 '57. (MIRA 10:12)
(Dolinsk District--Petroleum)

KOTSYUBINSKIY, O.Yu., doktor tekhn. nauk; IVANOV, D.P., doktor
tekhn. nauk, prof., retsenzent; ZHESTKOVA, I.N., inzh.
red.

[Warping of iron castings from residual stresses] Koroblenie
chugunnykh otlivok ot ostatochnykh napriazhenii. Moskva,
Mashinostroenie, 1965. 174 p. (MIRA 18:4)

Zhestkov, D.K.
RAZUMOV, N.V.; ZHESTKOV, D.K.

Rapid method for determination of nitrogen in petroleum and
petroleum products. Izv. vost. fil. AN SSSR no.11:60-62 '57.
(MIRA 11:1)

1. Sakhalinskiy kompleksnyy nauchno-issledovatel'skiy institut
Akademii nauk SSSR.
(Nitrogen) (Petroleum--Analysis)

ZHESTKOV, S.V., dotsent, kand.tehn.nauk

Solution of trinomial linear equations. Sbor. nauch. trud. LISI
no.3:247-255 '59. (MIRA 13:7)
(Differential equations, Linear)

ZHESTKOV, V.

Characteristics of adjustments and lubrication of U2 - AP - 3
and 1 -AP - 1,5 trailers. Avt.transp. 32 no.11:16-17 N '54.
(Motor trucks--Trailers) (MLRA 8:3)

ZHESTKOV, V.; MALINOVSKIY, P.

Improvements in the design of the U2-AP-3 automobile trailer
hitch. Avt.transp.34 no.5:27-28 My '56. (MLRA 9:9)

1.Irbitskiy saved avtopritsepev.
(Automobiles--Trailers)

ZHESTKOV, V.A.

Combined time relay. Priboestroenie no. 3:13-14. Mr 164.
(MIRA 17:6)

ZHESTKOV, V.A. inzhener.

Standards for general-purpose trailers, semitrailers and two-wheel trailers. Standartizatsiia no.1:33-35 Ja-Fe '56. (MLBA 9:2)

1.Glavnyy konstruktory avtoprigrasnyy zavoda.
(Automobiles--Trailers--Standards) (Truck trailers)

ZHESTKOV, V.A.

Area of use of transportation by means of dumping and self-dumping trucks. Gor zhur. no. 6:17-18 Je '61. (MIRA 14:6)

1. Glvnyy konstruktor Chelyabinskogo mashinostroitel'nogo zavoda avtotraktornykh pritsepov. (Dump trucks) (Mine haulage)

ZHESTKOV, V.A.

Testing electropneumatic drives for brakes of heavy trailers.
Avt. prom. 29 no.8:22-24 Ag '63. (MIRA 16:11)

1. Chelyabinakiy politekhnicheskii institut.

ACC NR: AP6018148

(A,N)

SOURCE CODE: UR/0326/65/012/006/1017/1023

AUTHOR: Molotkovskiy, Yu. G.; Zhestkova, I. M.

ORG: Institute of Plant Physiology im. K. A. Timiryazev, AN SSSR, Moscow (Institut fiziologii rasteniy AN SSSR)

TITLE: Morphological and functional modifications of isolated chloroplasts induced by oleate

SOURCE: Fiziologiya rasteniy, v. 12, no. 6, 1965, 1017-1023

TOPIC TAGS: chlorophyll, plant physiology, oleic acid, protein, organic phosphorus compound, plant chemistry

ABSTRACT: Investigations were conducted to determine the effect of unsaturated fatty acids, such as oleates, on the morphology and photochemical activity of isolated chloroplasts. Leaves of the broadbean -- *Vicia faba* -- which contain large chloroplasts capable of photophosphorylation were used in the experiments. The plants were grown in a greenhouse supplied with supplemental illumination by fluorescent lamps. The chloroplasts were isolated from the plants after 10-14 days of growth by the Arnon method. The residue obtained was suspended in a medium which was kept on ice as the initial material. The standard incubation medium for the Hill reaction consisted of 0.025 molar tri-buffer pH 7.8; 3 micromolar ferricyanide; a suspension of chloroplast containing 0.06 - 0.09 milligrams of chlorophyll. The reaction was induced by the exposure of the incubation medium to 42,500 lux for a period of 10 minutes. The experimental part of the investigations sought to estab-

UDC: 581.174:581.132

APPROVED FOR RELEASE: 03/15/2001

Card 2/2

LYASS, A.M., doktor tekhn. nauk; SHKLENNIK, Ya.I., kand. tekhn.
nauk, retsenzent; ZHESTKOVA, I.N., inzh., red.

[Quick hardening molding mixtures] Bystrotverdeiushchie
formovochnye smesi. Moskva, Mashinostroenie, 1965. 331 p.
(MIRA 18:2)

ZHESTKOVA, T.A.

Forming ice horizons in the sediments freezing according to
epigenetic type. Vest. Mosk. un. Ser. 4: Geol. 19 no.4:59-65
Jl-Ap '64. (MIRA 17:11)

1. Kafedra merzlotovedeniya Moskovskogo universiteta.

ZHESTKOVA, T.N.

Composition and cryogenic constitution of the varved clays
in the Vorkutsk deposit. Merzl. issl. no.3:91-102 '63.
(MIRA 17:6)

ZHESTKOVA, T.N.; FEL'DMAN, G.M.; DUKHIN, I.Ye.; SHVETSOV, P.F.

Formation of glacial horizons in epigenetic frozen strata.
Dokl. AN SSSR 156 no. 3:558-560 '64. (MIRA 17:5)

1. Chlen-korrespondent AN SSSR (for Shvetsov).

ZHESTKOVA, T.N.

Principal textural types of frozen Quaternary deposits in the
Vorkuta coal field. Trudy SOEi no.1:39-45 '60.

(MIRA 14:11)

(Vorkuta region—Frozen ground)

S/081/62/000/024/040/052
B106/B186

AUTHORS: Vasil'yeva, M. N., Kamerina, T. P., Komarova, Ye. I.,
Zhestkova, Ye. N., Maslova, M. F., Smirnova, Ye. V.,
Ivanov, N. N., Bikbayeva, N. S., Koptayeva, V. A.

TITLE: Choice of a new oiling agent for processing capron in
synthetic fiber plants

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24 (II), 1962, 947,
abstract 24P979 (Nauchno-issled. tr. Tsentr. n.-i. in-t
shelk. prom-sti. M., Rostekhnizdat, 1960 (1962), 82-94)

TEXT: On the basis of the results obtained in the testing of new oiling
agents the authors recommend that 2.5 - 4.5% of the type K-160 (-160)
should be applied to the fiber. The oiling agent consists of 82%
Velosite 7(L), 6% OP-4 (OP-4) and 6% Stearoks-6. Twisting is to be
stabilized by low-pressure steaming. [Abstracter's note: Complete
translation.]

Card 1/1

KOLONTSOVA, Ye.V., ZHESTOVSKAYA, M.I.

Effect of neutron bombardment on the structure of lithium fluoride crystals. Kristallografiia 5 no.1:56-62 Ja-F '60. (MIRA 13:7)

1. Moskovskiy gosudarstvennyy universite im. M.V. Lomonosova.
(Lithium fluoride)

24.7100

78099

SOV/70-5-1-8/30

AUTHORS: Kolontsova, Ye. V., Zhestovskaya, M. I.

TITLE: Effect of Neutron Bombardment on Structure of Lithium Fluoride Crystals

PERIODICAL: Kristallografiya, 1960, Vol 5, Nr 1, pp 56-62 (USSR)

ABSTRACT: The exposure of crystals to neutron radiation has been known to: (1) produce defects such as lattice vacancies, interstitial atoms, and "thermal zones"; (2) alter the solid state structure due to local rise of temperature; (3) melt and recrystallize certain regions of crystals. The authors studied the first group of effects by selective etching, and analyzing the diffuse scattering of X-rays. LiF was selected because of its low heat conductivity, high transparency to X-rays, and the presence of well known methods and agents of etching. Narrow beams of limited range of wavelengths permitted the deter-

Card 1/5

Effect of Neutron Bombardment on Structure
of Lithium Fluoride Crystals

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SOV/70-5-1-8/30

mination of disoriented regions and the intensity distribution within the diffuse scattering maxima. The crystals were placed in the camera with one of the [100] parallel to the incident beam, and two others to the vertical and horizontal axes of the camera. The intensities of scattered rays, developed before and after the exposure of crystals to neutron radiation, could be compared using the diffractions from a Ni-wire, placed just before the crystals, as a scale. The exposure to neutron radiation of $7.8 \cdot 10^{17}$ neutron/cm² intensity produced weak diffraction arcs around some diffraction spots but did not change the scattering regions. The increase of the intensity of neutron radiation to $2.2 \cdot 10^{18}$ neutron/cm² increased the number of diffractions along concentric rings; and produced irregularly distributed new spots and anomalous diffraction lines,

Card 2/5

Effect of Neutron Bombardment on Structure
of Lithium Fluoride Crystals

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SOV/70-5-1-8/30

trending from the pattern center to diffraction spots of (200)-type. Further increased intensity of neutron beams to $5 \cdot 10^{18}$ neutron/cm² made the additional diffractions even more diffuse and caused their coalescence; the anomalous diffraction lines became very complicated; the intensity of some diffractions increased while that of others decreased; the crystals became parted into slightly disoriented blocks, 0.1 to 1 μ across. Etching of crystals before and after the exposure to neutron radiation confirmed the conclusions based on the analysis of diffuse scattering. Unexposed crystals showed etch figures repeating the dislocation pattern, while exposed crystals got rough surfaces due to numerous uniformly distributed pits of irregular form. Within this uniformly etched surface, especially at its margins, there appeared equiaxial areas with deeper pits, and elongated areas parallel to [100], with rectangular pits. The depth and extension of pits as well as of the areas with deeper and rectangular

Card 3/5

Effect of Neutron Bombardment on Structure
of Lithium Fluoride Crystals

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SOV/70-5-1-8/30

pits increases with the intensity increase of neutron radiation. The equiaxial areas with deeper pits seem to represent disoriented blocks, while the rectangular pits are likely to develop on dislocations decorated with the gases of decomposition. Etching of crystals, layer after layer, disclosed that the effects of neutron bombardment decrease with the depth. At a certain depth (about 0.1 mm), depending on the intensity of neutron radiation, first the irregularly shaped pits, then the deeper pits, and finally the rectangular pits disappear completely. This surface layer, called fragmentation layer, crumbles within the equiaxial areas easily and permits etching of the underlying surface whose etch figures resemble those on the crystal before being exposed to neutron radiation. The authors believe that anomalous diffraction lines do not result from composition changes due to Li segregation, as assumed by A. Guinier and M. Lambert, but from the distribution of defects along the directions of weakest bonds (cleavage in the same (100) direction) which become even

Card 4/5

Li⁺ - F⁻ Neutron Bombardment of Single Crystals
of Lithium Fluoride Crystals

304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

weaker while exposed to neutrons, and can, consequently, break easily when partition into blocks takes place. There are 9 figures; and 14 references, 5 U.S., 5 Soviet, 2 French, 1 U.K., 1 Danish. The U.S. references are: J. J. Gilman, W. G. Johnston, G. W. Sleas, J. Appl. Phys., 29, 5, 747, 1958; J. J. Gilman, W. G. Johnston, J. Appl. Phys., 29, 6, 877, 1958; R. Chang, J. Appl. Phys., 28, 4, 385, 1957; J. Gilman, W. Johnston, J. Appl. Phys., 27, 9, 1018, 1956; P. Seltz, Phys. Rev., 98, 1530, 1955.

ASSOCIATION: Moscow State University imeni M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova)

SUBMITTED: June 2, 1959

Card 5/5

ZHESTOVSKIY, V.

Specialized plant for repairing motor-vehicle engines. Avt.
transp. 43 no.2:23-25 F '65.
(MIRA 18:6)

SOV/169-60-1-1063

Translation from: Referativnyy zhurnal, Geofizika, 1960, Nr 1, p 141 (USSR)

AUTHORS: Zhestyannikov, L.A., Kobrin, M.M.

TITLE: The F2-Layer of the Ionosphere During the Solar Eclipse on February 25, 1952, in Gor'kiy

PERIODICAL: V sb.: Polnyye solnechn. zatmeniya Febr. 25, 1952, and June 30, 1954. Moscow, AS USSR, 1958, pp 351 - 355

ABSTRACT: Results of a vertical sounding of the ionosphere in Gor'kiy during the eclipse on February 25, 1952, are described; the results were obtained by a manual ionospheric station having a range from 3.5 to 12.0 Mops. The course of the visual eclipse was computed, for comparison for altitudes of 0, 400, and 600 km from faculas, hydrogen filaments, and the corona, taking into consideration the distribution of the green corona line. The computations of the true distribution of the electron concentration along the altitude of the F2-layer showed that the F2-layer strongly differed from the parabolic, both in the day of eclipse and in the control days. The authors assume that the

Card 1/2

ZHESTYANIKOV, V.D.

ZHESTYANIKOV, V.D.

Some characteristics of nutrition of sulfanilamide-resistant
dysentery bacilli strains. Zhur. mikrobiol. epid. i immu. no.6:
66-67 Jo '54. (MLBA 7:7)

1. Iz kafedry farmakologii Voenno-morskoy meditsinskoy akademii
i sanitarno-epidemiologicheskoy laboratorii.
(SHIGELLA)

VAL'DSHEYN, E.A.; ZHESTYANIKOV, V.D.

Postirradiation recovery of *Escherichia coli* irradiated under different conditions (in air, in nitrogen and in nitrogen in the presence of cysteamine). *Radiobiologiya* 3 no. 6:809-814 '63. (MIRA 17:7)

1. Institut tsitologii AN SSSR, Leningrad.

ZHESTYANIKOV, V.D.

Radioresistance of *Escherichia coli* cultivated under the
influence of continuous gamma irradiation. Radiobiologiya 3
no. 6:847-854 '63. (MIRA 17:7)

1. Institut tsitologii AN SSSR, Leningrad.

ACCESSION NR: AP4015092

S/0205/64/004/001/0096/0101

AUTHOR: Zhestyanikov, V. D.

TITLE: Development of elongated forms of E. coli during cultivation under continuous gamma-irradiation

SOURCE: Radiobiologiya, v. 4, no. 1, 1964, 96-101

TOPIC TAGS: E. coli cultivation, continuous gamma-irradiation, increased radioresistance, S-shaped dose-effect curve, E. coli elongated form, subbacteriostatic action, erythromycin concentration, high temperature, cell division inhibition, first passage

ABSTRACT: This work is largely based on literature sources which indicate that prolonged cultivation of E. coli B, B/r, and K 12 under continuous gamma-irradiation at low dose rates increases their radioresistance and produces S-shaped dose-effect curves for many of the gamma-resistant variants. The author assumes that this increased radioresistance may be related to morphological changes of culture properties, particularly the development of elongated forms of E. coli B, and then proceeds to determine the validity of such an assumption.

Card 1/3

ACCESSION NR: AP4015092

First the morphology of *E. coli* gamma R strains were studied with a phase contact device and the use of dyes. Then, to induce elongated forms of bacteria, *E. coli* B strains were cultivated under the subbacteriostatic effect of concentrated erythromycin (25-30 mkg/ml) or of 46°C temperature for 18 hrs. Radioresistance of the variants was determined according to methods described in a 1953 study by the same author. *E. coli* B cultivated under the subbacteriostatic effects of erythromycin or 46°C temperature produces elongated forms, increases its radioresistance, and has S-shaped dose-effect curves. These changes are similar to those produced by continuous gamma-irradiation and disappear after the first passage without the inducing factor action. Radiation in sublethal doses and nonradiation factors (erythromycin and 46°C temperature) have the capacity to inhibit the division of cells without affecting their growth, which apparently contributes to increased radioresistance, development of elongated forms, and to S-shaped dose-effect curves. Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: Institut tsitologii AN SSSR, Leningrad (Cytology Institute AN SSSR)

Card 2/3

ACCESSION NR: APL4015092

SUBMITTED: 220ct62

DATE ACQ: 12Mar64

ENCL: 00

SUB CODE: 18

NR REF SOV: 009

OTHER: 021

Card 3/3

ZHESTYANIKOV, V.D.

Nucleic acid content in Escherichia coli of different radio-
resistance. Dokl. AN SSSR 157 no.4:975-978 Ag '64
(MIRA 17:8)

1. Institut tsitologii AN SSSR. Predstavleno akademikom
L.S. Shtern.

ABRAMOVA, Zh.I., kand. med. nauk; ANICHKOV, S.V., prof.; BELEN'KIY, M.L.,
 prof.; VAL'DMAN, A.V., doktor med. nauk; VEDELEYEVA, Z.I., kand.
 med. nauk; VINOGRADOV, V.M., kand. med. nauk; GERSHANOVICH, M.L.,
 kand. med. nauk; GINETSIINSKIY, A.G., prof.; GORBOVITSKIY, S.Ye.,
 prof.; GREBENKINA, M.A., dotsent; GREKH, I.F., dots.; DENISENKO,
 P.P., kand. med. nauk; D'YACHENKO, P.K., kand. med. nauk; ZHESTYANIKOV,
 V.D., kand. med. nauk; ZAUGOL'NIKOV, S.D., prof.; ZEYMAL', E.V., kand.
 med. nauk; ISKAREV, N.A., kand. med. nauk; KARASIK, V.M., prof.;
 KIVMAN, G.Ya., kand. med. nauk; KOZLOV, O.D., kand. med. nauk; KROTOV,
 A.I., doktor veter. nauk; KUDRIN, A.N., doktor med. nauk; LAZAREV, N.V.,
 prof.; LAPIN, I.P., kand. med. nauk; MEL'NIKOVA, V.F., prof.;
 MESHCHERSKAYA, K.A., prof.; MIKHEL'SON, M.Ya., prof.; MOSHKOVSKIY,
 Sh.D., prof.; PADEYSKAYA, Ye.N., kand. med. nauk; PARIBOK, V.P., prof.;
 PERSHIN, G.N., prof.; PLANEL'YES, Kh.Kh., prof.; PONOMAREV, G.A.,
 prof.; POSKALENKO, A.N., kand. med. nauk; MUKHIN, Ye.A., dots.;
 ROZOVSKAYA, Ye.S., dots.; RYBOLOVLEV, R.S., starshiy nauchnyy sotr.;
 SALIYAMON, L.S., kand. med. nauk; SAFRAZBEKYAN, R.R., kand. biol. nauk;
 TIUNOV, L.A., kand. med. nauk; TOMILINA, T.H., dots.; FELISTOVICH,
 G.I., kand. med. nauk; FRUYENTOV, N.K., kand. med. nauk; KHAUNINA,
 R.A., kand. med. nauk; TSYGANOV, S.V., prof.[deceased]; CHERKES, A.I.,
 prof.;

(Continued on next card)

ABRAMOVA, Zh.I.—(continued) Card 2.

CHERNOV, V.A., doktor med. nauk; SHADURSKIY, K.S., prof.;
YAKOVLEV, V.Ya., doktor khim. nauk; MASHKOVSKIY, M.D., red.;
NIKOLAYEVA, M.M., red.; RULEVA, M.S., tekhn. red.; CHUNAYEVA,
Z.V., tekhn. red.

[Manual on pharmacology] Rukovodstvo po farmakologii. Leningrad,
Medgiz. Vol.2. 1961. 503 p. (MIRA 15:1)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Anichkov, Karasik, Cherkes). 2. Chlen-korrespondent Akademii medi-
tsinskikh nauk SSSR (for Belen'kiy, Ginetsinskiy, Moshkovakiy,
Planel'yes).

(PHARMACOLOGY)

ZHESTYANIKOV, V. D.

Factors Influencing the Sensitivity of Cells
Tuesday Afternoon Session II-6-1 (Cont'd.)

Radioresistance of *Escherichia coli* Cultured under Continuous Action of γ -Rays

V. D. Zhestyanikov

Radioresistance of three strains of *Escherichia coli* (B, D/r and K 12) grown on nutrient agar under continuous ^{60}Co γ -irradiation (initial doses are 2260 r and 550 r/24 hr) increases during 18 months (" γ -resistant" strains). Radioresistance was determined from survival curves obtained from viable counts on bacterial suspensions in water after X-irradiation. Survival curves for numerous varieties of each strain were of sigmoid character due to elongated bacteria (inhibition of cell division). After 5 passages of " γ -resistant" bacteria without γ -irradiation, survival curves became exponential again, though the radioresistance of strain D remained higher.

Increase of radioresistance, formation of elongated bacterial forms, and the sigmoid character of survival curves were also observed when *E. coli* B were cultured in the presence of sub-bacteriostatic concentrations of erythromycin at 45°C. The above changes, similar to those induced by the prolonged action of γ -rays, disappeared after one passage without the influence of the inducing agent.

Experiments on heat reactivation show that *E. coli* B grown at 45°C became reactivated after X-irradiation: the survival curve was higher than at 37°C. The ratio was reversed for D/r. For " γ -resistant" *E. coli* B and D/r, culture at 37° or 45-47°C yielded no marked differences in the survival curves.

Increased radioresistance of *E. coli* as a result of γ -irradiation is evidently connected with selection of the most resistant individuals in heterogeneous populations of bacteria. It is not improbable that this phenomenon is preceded by the appearance of radioresistant mutants.

Institute of Cytology, Academy of Sciences of the USSR, Leningrad

report presented at the 2nd Intl. Congress of Radiation Research,
Harrogate/Yorkshire, Gt. Brit., 7-11 Aug 1962

ACCESSION NR: AP4001909

S/0205/63/003/006/0809/0814

AUTHOR: Val'dshtoy, E. A.; Zhestyanikov, V. D.

TITLE: Restoration of Escherichia coli B. after irradiation under various conditions (in air, in nitrogen, and in nitrogen in the presence of cysteamine)

SOURCE: Radiobiologiya, v. 3, no. 6, 1963, 809-814

TOPIC TAGS: lethal dose curve, bacterial culture, postirradiation bacteria restoration

ABSTRACT: Escherichia coli B (E. coli B) were X-irradiated with doses ranging from 3 to 24 krad (RUM-11 unit, 200 kv, 20 ma, focal length 70 mm, no filter, 1000 rad/min) in air, nitrogen, and nitrogen in the presence of cysteamine. Then irradiated E. coli B were incubated in different culture mediums at 19°, 37°, and 45°C for 20-48 hrs. Restoration volume indicating the number of restored cells compared to the number of damaged cells served as an index for a given radiation dose. A comparison of restoration volumes for E. coli B irradiated under different conditions but cultivated in the same cultures shows that the restoration volume is lowest for E coli Card 1/2

ACCESSION NR: AP4001909

B irradiated in air. Irradiation under anoxic conditions increases the restoration volume in all cases. Restoration volume increases even more when cysteamine is present during irradiation and post-radiation cultivation temperature is 45°C. Restoration volume depends first on irradiation conditions (air, nitrogen, and nitrogen in the presence of cysteamine) and secondly depends on radiation dose. "The authors express their gratitude to V. P. Paribok for valuable advice and discussion of the work." Orig. art. has: 3 figures, 3 tables.

ASSOCIATION: Institut tsitologii AN SSSR, Leningrad (Cytology Institute, AN SSSR)

SUBMITTED: 17Jan63

DATE ACQ: 13Dec63

ENCL: 00

SUB CODE: AM

NO REF SOV: 006

OTHER: 021

Card 2/2

ACCESSION NR: AP4001914

S/0205/63/003/006/0847/0854

AUTHOR: Zhestyanikov, V. D.

TITLE: Radioresistance of *Escherichia coli* cultivated under continuous Gamma irradiation

SOURCE: Radiobiologiya, v. 3, no. 6, 1963, 847-854

TOPIC TAGS: Gamma irradiation, bacteria radioresistance, *Escherichia coli* radioresistance

ABSTRACT: Three strains of *Escherichia coli* (B, B/r (Carnegie) and K 12) were cultivated for 22 mos under continuous gamma irradiation with daily starting doses of 2260 and 550 r. Each of the 3 resulting variants was placed in a Petrie cup with a nutritive medium and was gamma irradiated for 24 hrs at 37°C to determine survival rate by number of macrocolonies. Radioresistance of the bacteria variants was investigated after 24 hrs and 1, 2, 8-22 mos by growing cultures in a test tube directly under X-irradiation (RUM-11 unit, 180 kv, 20 ma, focal length 50 mm, no filter) for 18 hrs. Survival dose curves were used as indices. Radioresistance of all three variants is higher than that of the initial strains with the most marked

Card 1/2

ACCESSION NR: AP4001914

increase in the E. coli B variant. The three initial strains are characterized largely by exponential dose curves and the variants are characterized largely by S-shaped curves. In populations of variants, zooids are found whose radioresistance does not differ from that of the initial cultures, indicating that radioresistance changes do not take place at the same time in a population. Basically the selection of preexisting or induced mutants is considered responsible for increased radioresistance of E. coli cultivated under continuous gamma irradiation. "The author expresses gratitude to V. P. Paribok for attention and interest in the work and to Ye. Ye. Kranoperova and N. Ye. Titova, laboratory technicians, for their assistance. Orig. art. has: 3 figures, 2 tables.

ASSOCIATION: Institut tsitologii AN SSSR, Leningrad (Cytology Institute, AN SSSR)

SUBMITTED: 22Oct62

DATE ACQ: 13Dec63

ENCL: 00

SUB CODE: AM

NO REF SOV: 012

OTHER: 022

Card 2/2

ZHESTYANIKOV, V.D.

Formation of the elongated forms of *Escherichia coli* under the
influence of continuous γ -irradiation. *Radiobiologiya* 4 no.1:
96-101 '64. (MIRA 17:4)

1. Institut tsitologii AN SSSR, Leningrad.

ACC NR: AP7006775

SOURCE CODE: UR/9053/67/009/001/0003/0020

AUTHOR: Val'dashteyn, E. A.; Zhestyanikov, V. D.

ORG: Laboratory of Radiation Cytology, Institute of Cytology, AN SSSR, Leningrad (Laboratoriya radiatsionnoy tsitologii Instituta tsitologii AN SSSR)

TITLE: Molecular mechanisms of cell reparation from radiation injuries

SOURCE: Tsitologiya, v. 9, no. 1, 1967, 3-20

TOPIC TAGS: radiation ~~and~~ effect, ~~UV~~ radiation biologic effect, ~~radiation recovery, dark recovery, photoreactivation, cell~~ *physiology*, UV radiation

ABSTRACT: The author reviews some contemporary concepts of the mechanisms of cellular recovery from radiation-induced injuries. This comprehensive article is divided into the following sections: 1) molecular nature of injuries caused by UV radiation; 2) photoreactivation; 3) dark recovery; 4) molecular mechanism of dark recovery; 5) specificity of the mechanism of dark recovery; 6) biological role of radiation recovery. It is felt that DNA reparation after radiation injury takes place via photoreactivation and dark recovery. During photoreactivation,

Card 1/2

UDC: 591.044.82:612.014.48

ACC NR: AP7006775

the recovery of normal DNA structure takes place by means of dimer cleavage (pyrimidines). This mechanism is very specific in that it applies only to UV radiation. Dark recovery is more complicated and occurs in several stages: dissociation of photoproducts from DNA; expansion of the lumen formed; accumulation of nucleotids in the lumen; coupling of P-O bonds; recovery of DNA structure. Dark recovery is non-specific, occurring after UV- and ionizing radiations, p³² transmutation, and exposure to many radiomimetics and chemical mutagens. The recovery of individual lesions does not require the total enzyme resources necessary for UV-induced recoveries. The process of dark recovery participates in the maintenance of natural DNA structure and is closely associated with genetic recombination and transformation. [CD]

SUB CODE: 06/ SUBM DATE: 10Jun66/ ORIG REF: 022/ OTH REF: 096
ATD PRESS: 5117

Cord 2/2

ZHESTYANIKOV, V.D.

Radioresistance of antibiotic-resistant *Escherichia coli*.
Radiobiologiya 1 no.4:573-579 '61. (MIRA 17:2)

1. Institut tsitologii AN SSSR, Leningrad.

ZHESTYANIKOV, V.D.

Radiation resistance of thermotolerant strains of Escherichia
coli. Sbor. rab. Inst. tsit. no.4:135-142 '63 (MIRA 17:3)

ZHESTYAMIKOV, V. D.

"Increase in the Radioresistance of Escherichia Coli Cultivated
under Continuous Gamma-Irradiation." pp. 30

Institute of Cytology AS USSR Laboratory of Radiation Cytology

II Nauchnaya Konferentsiya Instituta Tsitologii AN SSSR. Tezisy Dokladov
(Second Scientific Conference of the Institute of Cytology of the Academy
of Sciences USSR, Abstracts of Reports), Leningrad, 1962 88 pp.

JPRS 20,631

ZHESTYANIKOV, V.D.

Hereditary changes in *E. coli* in cultures continuously exposed
to γ rays. Radiobiologia 4 no.4:548-553 '64.

(MIRA 17:11)

ZHESTYANIKOV, V.D.

[Chemotherapy of bacillary dysentery] Khimioterapiia bakterial'noi
dizenterii. [Leningrad] Medgiz, 1955. 146 p. (MLRA 9:4)
(DYSENTERY)

ZHESTYANIKOV, V.D. (Tallin)

Effect of levomycetin and synthomycin on the outcome of anaphylactic shock in guinea pigs. Antibiotiki 3 no.2:56-58 Apr-May '58.

(MIRA 12:11)

(CHLORAMPHENICOL, effects,
on exper.anaphylactic shock in guinea pigs(Rus))

(ALLERGY, experimental,
eff. of chloramphenicol on anaphylactic shock in
guinea pigs (Rus))

30362

S/205/61/001/004/021/032
D298/D303

27.1220

AUTHOR: Zhestyanikov, V. D.

TITLE: Resistance to radioactivity of Escherichia coli
resistant to antibiotics

PERIODICAL: Radiobiologiya, v. 1, no. 4, 1961, 573, 579

TEXT: The aim of the work was to study the resistance to radio-activity of strains of Escherichia coli which were resistant to anti-biotics of various classes. The tests were carried out with 3 strains of E. coli B, B/r and K12. Strains resistant to penicillin, levomycetin, streptomycin, mycin, terramycin and erythromycin were obtained by pas-sage on a meat-peptone broth (pH 7.3) with an increasing concentration of the particular antibiotic every 48 - 72 hours. The bacteria were suspended in tap water and irradiated with an PYM-11 (RUM-11) apparatus at an intensity of 1800 r/min. in doses ranging from 5.4 to 54 kr. The survival rate of the cultures was determined from the number of colonies which formed, expressed as a fraction of the colonies which formed in

Card 1/3

30362

S/205/61/001/004/021/032
D298/D303

Resistance to radioactivity...

the non-irradiated control samples. It was found that the changes in the resistance to radiation depended on the individual features of the strain. In *E. coli* B which was resistant to penicillin, resistance decreased after irradiation. In *E. coli* B strains resistant to erythromycin, mycerin and terramycin, the resistance to radioactivity was increased after irradiation. In *E. coli* B strains resistant to levomycetin and streptomycin, no change in the resistance to radioactivity—as compared with the original strain—was noted. Strains of *E. coli* B/r resistant to penicillin lowered their resistance after irradiation, while *E. coli* B/r strains resistant to mycerin increased their resistance. No change was noted in the *E. coli* B/r strains resistant to the other antibiotics. *E. coli* K12 strains resistant to the 6 antibiotics showed no change in resistance to radiation after irradiation. The author was assisted in his work by V. P. Paribok, K. I. Pravdina and N. A. Tolokontsev. There are 5 figures, 3 tables and 24 references: 8 Soviet-bloc and 16 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: T. S. Matney, D. M.

Card 2/3

30362

Resistance to radioactivity...

S/205/61/001/004/021/032
D298/D303

Shankel, O. Wyss, J. Bact., 75, 180, 1958; S. Jtagaki, Tokushoma, J.
Exptl. Med. 6, 299, 1960; R. F. Hill, Biochim. and Biophys. acta, 30,
636, 1958; R. F. Hill, Rad. Res., 11, 446, 1959.

ASSOCIATION: Institut tsitologii AN SSSR (Institute of Cytology, AS
USSR), Leningrad

SUBMITTED: March 7, 1961

Card 3/3

4

ZHESTYANIKOV, V.D.

Method for titrating the polyene antifungal antibiotics 26/1 and
nystatin. Eksp. i klin. issl. po antibiot. 2:274-281 '60.
(MIRA 15:5)

(ANTIBIOTICS)

(MYCOSTATIN)

ZHESTYANIKOV, V.D.

Absorption, distribution and excretion of antibiotic 26/1. Eksp.
i klin. issl. po antibiot. 2:282-288 '60. (MIRA 15:5)
(ANTIBIOTICS)

ZHESTYANIKOV, V.D.

Anti-Trichomonas activity of the antibiotics 26/1 and nystatin.
Eksp. 1 klin. issl. po antibiot. 2:300-306 '60. (MIRA 15:5)
(ANTIBIOTICS) (MYCOSTATIN) (TRICHOMONAS)

VOROSHILOVA, Marina Konstantinovna; ZHEVANDROVA, Vera Iyanovna;
BALAYAN, Mikhail Surenovich; KARON, I.I., red.

[Methodology of laboratory diagnosis of enterovirus
infections] Metody laboratornoi diagnostiki enterovirus-
nykh infektsii. Moskva, Meditsina, 1964. 151 p.
(MIRA 17:6)

Zhestyanikov, V. M. -- "Investigation of the Process of Application of a Carbon Film to Parts of Instruments." Cand Tech Sci, Leningrad Inst of Aviation Instrument Building, Leningrad 1953. (Referativnyy Zhurnal--Khimiya, No 1, Jan 54)

SO: SUM 168, 22 July 1954

1. ZHESTIANIKOV, V. M., Eng.
2. USSR (600)
4. Carbon
7. On the history of the study of the electric properties of carbon, Elektrichestvo, no. 1, 1953.
9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

OBNOVLENSKIY, Petr Avenirovich; ZHESTYANIKOV, Vladimir Mikhaylovich;
ZAIKHA, Isaak Moiseyevich; RABINOVICH, Abram Grigor'yevich;
SHTRAFUN, Ya.N., kand. tekhn.nauk, retsenzent; TERGAN, V.S.,
inzh., retsenzent; BUMSHTEYN, S.I., red.

[Manufacture of automatic control and remote control equip-
ment] Proizvodstvo apparatury avtomatiki i telemekhaniki.
Moskva, Mashinostroenie, 1964. 402 p. (MIRA 17:10)

RODIONOV, Sergey Vasil'yevich; ZHASTYANIKOV, Vladimir Mikhaylovich;
RYABOV, Leonid Ivanovich; GARIKYAN, Knarik Yervandovna;
GONCHAROV, N.A., red.

[Finishing wood articles in an electrostatic field] Otdelka
izdelii iz drevesiny v elektrostatocheskom pole. Moskva,
Lesnaya promyshlennost', 1964. 96 p. (MIRA 17:10)

RODIONOV, S.V.; MININ, A.M.; ZHESTYANNIKOV, V.M.; GUDKIN, V.G.

Design of a standard unit for the finishing of products in the
electrostatic field. Der. prom. 15 no.1:19-20 Ja '66.

(MIRA 19:1)

AUTHOR: Zhestyanikov, V. M. and Grinberg, I. I.
 TITLE: On the operation of vacuum photocells²⁵ at reduced voltage
 PERIODICAL: Izv. Vuz., Priborostroyeniye, v. VI, no. 2, 1963, 9-11

TEXT: Although photocells¹⁰ are important components of many industrial and scientific instruments, little attention has been paid to their operation under abnormal conditions. The authors consider the effect of reduced voltage on the circuit supplying the lamp illuminating the photocell. An empirical equation

$$I_p = \frac{U_p \phi}{K_1 + K_2 U_p}$$

is obtained for the volt-ampere characteristic of an antimony-cesium photocell in the region of reduced voltage. Here I_p is the photo current in μA , U_p is the photocell voltage in v, $\phi = \text{const}$ is the light flux in lumens, and K_1 , K_2 are

Card 1/2

L 13113-63

On the operation of vacuum photocells...

S/146/63/006/002/002/010

coefficients characterizing the light source and the sensitivity of the photocell. Analysis of the experimental results using the theory of errors yields equation linking the deviation of the photo current ΔI_p with the percentage deviations of the photocell voltage $\delta_{U_p}\%$ and the lamp voltage $\delta_{U_L}\%$. The most general of these equations reads:

$$\Delta I_p = C_1 \cdot \delta_{U_p}\% + C_2 \cdot m \delta_{U_L}\%$$

where $m = 3.61$ for a tungsten filament. This equation is most accurate for $U_p = 10-300$ v and for variations in the lamp voltage of $\pm 10\%$. The method can also be applied to non-vacuum photocells. There is 1 figure.

ASSOCIATION: Lesotekhnicheskaya akademiya im. J. M. Kirova (Forestry Engineering Academy imeni S. M. Kirov)

SUBMITTED: March 30, 1962

Card 2/2

RODIONOV, S.V.; ZHESTYANIKOV, V.M.; RYABOV, L.I.; IZRAL'YANTS, V.M.;
GOLUBEVA, T.M., inzh., red.; SHILLING, V.A., red.izd-va;
BELOGUROVA, I.A., tekhn. red.

[Varnishing of wooden components in an electrostatic field
using capacitive generators] Lakirovka detalei iz drevesiny
v elektrostatičeskom pole s priimeniem emkostnykh genera-
torov. Leningrad, 1962. 27 p. (Leningradskii dom nauchno-
tekhnicheskoi propagandy. Obmen peredovym opytom. Seria:
Derevoobrabatyvaiushchaya promyshlennost', no.9)

(MIRA 16:3)

(Varnish and varnishing)

YERMOLINSKIY, Feodosiy Dmitriyevich; ZHESTYANNIKOV, V.M., red.;
PROTANSKAYA, I.V., red.izd-va; SHIEKOVA, A.Ye., tekhn.red.

[Manual for electricians working in lumbering] Posobie dlia
elektromekhanikov lesozagotok. Moskva, Goslesbumizdat, 1962.
288 p. (MIRA 16:4)

(Electricity in lumbering--Handbook, manuals, etc.)

ZHESTYANI KOV, V. M.

Stacy Adams

RECEIVED FOR YOU I HAVE

100

[illegible]

Class. Restricted. 30,000 copies printed.
 E. A. Arutunyan, N. P. Bagratyan, E. A. Arutunyan, and E. A. Arutunyan, eds. (This
 is a reprint of the original work by E. A. Arutunyan, N. P. Bagratyan, E. A. Arutunyan, and E. A. Arutunyan, eds. 1963.)

of Hancock; E. V. Parvov, and A.
Th. V. Kordatsky, V. V. Parvov,
vol. I. N. P. Bogoroditskiy and V. V.
N. B. Bolshova.

Vol. 11. H. P. Reproduction of the text of the report of the
H. P. Reproduction.

NOTE: This handbook is intended for technical personnel of other
trial and radio engineering establishments, power stations and
institutions, electric repair shops, libraries, and scientific
research institutions of the handbook contains basic information
CONTRACT: This handbook, metallic conductors, electrical carbon,
on magnetic electrolytes used in modern engineering, and
and important electrolytes used in modern engineering, and
various chemical materials. It does not include information on
materials, which were covered in the Department of Electrotechnics and
scientists associated with the Department of Electrotechnics and
scientists of the Institute of Electrotechnics (Leningrad and Moscow).
Institute of V. I. Ul'yanov (Leningrad), Institute of V. I. Ul'yanov and
Institute of V. I. Ul'yanov, H. P. Reproduction, and
Candidate of Technical Sciences, H. P. Reproduction, and
H. P. Reproduction, Assistant, H. P. Reproduction, and
H. P. Reproduction for their assistance. References accompany each
part.

Handbook on Electrical Engineering (Cont.)

SOV/5058

| | |
|--|-----|
| Ch. XIX. Cermet Electric Arcing Contacts (I. P. Melashenko) | |
| 1. General information | 245 |
| 2. Manufacturing processes | 246 |
| 3. Structure of cermet compositions | 248 |
| 4. Properties of cermet contacts | 250 |
| 5. Application of cermet contacts | 257 |
| Ch. XX. Soldering Materials (Z. F. Vorobey) | |
| 1. Soldering | 259 |
| 2. Solders | 260 |
| 3. Fluxes | 263 |
| Ch. XXI. Electrical Carbon and Products Made of Carbon (V. M. Zhestyanikov) | |
| 1. General information | 265 |
| 2. Raw materials | 266 |
| 3. Electrical resistors containing carbon | 268 |
| 4. Carbon electrodes (for furnaces and electrochemical industrial production) | 284 |

Card 11/19

Handbook on Electrical Engineering (Cont.)

SOV/5058

| | |
|---|-----|
| 5. Carbon electrodes for welding | 289 |
| 6. Carbon electrodes for illumination | 290 |
| 7. Carbon electrodes for galvanic cells | 294 |
| 8. Carbon products for communications equipment | 295 |
| 9. Electrical carbon products (for electric vacuum and gas-discharge devices) | 298 |
| 10. Brushes for electric machinery | 300 |
| 11. Miscellaneous carbon products | 314 |

Bibliography to Part II (94 references: 64 Soviet, 23 English, 5 German, 1 Czech, and 1 French)

317

PART III. SEMICONDUCTOR MATERIALS AND PRODUCTS

Ch. XXII. Basic Information on Semiconductors (V.V. Pasynkov)

| | |
|--|-----|
| 1. Introduction | 319 |
| 2. Ideas on the mechanism of electric conductivity | 320 |

Card 12/19

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ponents and units of radio apparatus, by / V. M. Zhestyannikov [1]
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Zhestyanikov, Vladimir Mikhaylovich and Peter Avenirovich
Obnovlenskiy

Tekhnologiya i oborudovaniye proizvodstva detaley i uzlov radio-
tekhnicheskoy apparatury (Production Methods and Equipment
Employed in the Manufacture of Radio Parts and Units) Moscow,
Oborongiz, 1958. 251 p. 11,000 copies printed.

Reviewer: Kalita, Ye. D., Engineer; Ed.: Blaut-Blacheva, V.I.,
Engineer; Ed. of Publishing House: Sheynfaun, L.I.;
Tech. Ed.: Zudakin, I.M.; Managing Ed.: Sokolov, A.I.,
Engineer.

*Approved as a textbook for aviation and
radio-engineering departments of Special
Secondary Schools of the Ministry of Higher Education.*

*COVERAGE: The authors describe the planning of manufacturing pro-
cesses and explain the processes of forging, casting, welding,*

Production Methods and Equipment (Cont.) SOV/1323

brazing, soldering and moisture-proofing. They describe the manufacture of capacitors, resistors, transformers, chokes, switches, waveguides and delay lines made of plastic and ceramic materials. Equipment used in the manufacture of these parts is also described.

The authors claim that until now the Soviet technical literature has not made available a textbook for tekhnikums covering the subject of production processes involved in the manufacture of radio parts. They state that the present book was written to fill this gap.

Chapters IX and XII and the larger part of paragraph 8.3 were written by Engineer A.G. Rabinovich.

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Card 2/8

Production Methods and Equipment (Cont.) SOV/1323

TABLE OF CONTENTS:

Foreword

3

Introduction

5

- Ch. 1. Organization of the Plant, Planning of Production Processes, Technological Documentation
1. Organization of the plant for the manufacture of radio parts and units
 2. Definitions of basic manufacturing processes
 3. Types of production
 4. Technical preparation for production
 5. Technological documentation

7

7

8

9

10

16

- Ch. 2. Preparatory Forging Operations, Casting, Heat Treatment, Brazing, Soldering and Rolling
1. Preparatory forging operations and preparation of sheet and bar stock

19

19

Card 3/8

Production Methods and Equipment (Cont.) SOV/1323

| | |
|--|----|
| 2. Manufacture of parts by casting | 26 |
| 3. Heat treatment of metal parts | 28 |
| 4. Brazing and soldering of metal parts. Cold rolling | 31 |
| Ch. 3. Moisture-proofing Operations | |
| 1. General information | 36 |
| 2. Drying process before impregnation | 36 |
| 3. Impregnation of radio parts | 37 |
| 4. Coating with varnishes and compounds | 41 |
| 5. Production of water-repellent films using silico-organic compounds ("hydrophobization") | 45 |
| | 48 |
| Ch. 4. Manufacture of Plastic Parts | |
| 1. Press-forming of thermosetting plastics | 49 |
| 2. Compression molding of plastics | 50 |
| 3. Bonding, welding, machining and stamping | 61 |
| 4. Manufacture of fluorine plastic parts | 64 |
| 5. Metallization of plastic parts | 74 |
| | 76 |
| Ch. 5. Manufacture of Ceramic Parts | |
| 1. Preparation of materials | 78 |
| | 79 |

Card 4/8

Production Methods and Equipment (Cont.) SOV/1323

| | |
|---|-----|
| 2. Forming the material into the part | 84 |
| 3. Firing process | 91 |
| 4. Glazing of ceramic parts | 93 |
| 5. Machining of ceramic parts after firing | 95 |
| 6. Metallizing of ceramic parts | 98 |
| 7. Manufacture of glass partition-insulators | 100 |
| Ch. 6. Manufacture of Capacitors | |
| 1. General information | 102 |
| 2. Capacitors with paper dielectric and foil plates | 102 |
| 3. Metallized paper capacitors | 103 |
| 4. Capacitors with polystyrene film dielectric | 113 |
| 5. Mica capacitors | 122 |
| 6. Electrolytic capacitors | 126 |
| 7. Glass - enamel capacitors | 134 |
| 8. Miniature ceramic capacitors | 138 |
| 9. Variable capacitors with air dielectric | 141 |
| | 142 |
| Ch. 7. Manufacture of Resistors | |
| 1. General information | 147 |
| Card 5/8 | 147 |